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Multifamily Standard

California Building Energy Efficiency Standards Revisions for July 2003 Adoption

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Multifamily Standard

The current residential and nonresidential standards do not adequately address energy issues regarding multifamily construction. This Initiative in particular will focus on envelope and equipment measures, and investigation of potential changes in the occupancy and operation schedules. This will entail generating a new base case building, created from research into typical construction practices, reviewing and possibly revising the occupancy and operations assumptions, and incorporating water heating and HVAC components as required.

Benefits

Because low-rise multifamily construction practice is compared to single family residential construction practice, and high-rise multifamily construction requirements are split between residential and nonresidential portions of the code, many elements are overly generous. This results in too lenient a standard for this occupancy type. Modifications could be made to tighten the standard, thereby ensuring persistent energy savings.

Environmental Impact

This measure has no adverse environmental impacts.

Type of Change

This measure would affect the residential standards and the nonresidential standards, the compliance manuals and the ACMs. The proposed changes will affect the Standards' baseline and modeling assumptions.

Measure Availability and Cost

For the most part, existing measure and construction cost assumptions could be used for this analysis. New incremental costs and assumptions will be developed as appropriate.

Useful Life, Persistence and Maintenance

Energy savings related to this measure will persist. Persistence and maintenance are not issues.

Performance Verification

Not applicable.

Cost Effectiveness

The CEC accepted cost effectiveness criteria will be used while establishing measures for this building type. It is expected that all proposed changes to the standards will include existing, familiar measures that are cost effective.

Analysis Tools

Existing CEC accepted analysis tools will be used and modified for this effort. These include residential and nonresidential ACMS.

Relationship to Other Measures

These changes will need to be coordinated with the Central System Standard Design for Multifamily Buildings, residential water heating, budgets and all other multifamily or water heating topics under review.

Bibliography and Other Research

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